



CITY OF HOUSTON

Administration & Regulatory Affairs Department
Strategic Purchasing Division

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October 7, 2010

Subject: **Letter of Clarification No. 2,
Twin-Engine Helicopter for the Houston Police
Department**

Reference: **Invitation to Bid No.: S34-N23751**

To: All Prospective Suppliers:

This letter of Clarification is issued to revise the above referenced solicitation as follows:

1. On Page 17 of 30 of the bid document, change Specification 5.3.3 to read **"Emergency Locator Transmitter (ELT). An Artex C406-2HM ELT System with NAN interface shall be installed"**.
2. On Page 17 of 30 of the bid document, change Specification 5.3.4 to read **"Global Positioning System (GPS). A Garmin GNS 430W GPS/Nav/Comm shall be installed"**.
3. On Page 20 of 30 of the bid document, change Specification 6.1 to read **"Thermal Imaging/Camera"**.
4. On Page 21 of 30 of the bid document, delete the following statement at the end of the paragraph **"no older than 30 days shall be provided"**.

This clarification is hereby incorporated in this bid document and all bidders are directed to bid accordingly.

When issued, Letter(s) of Clarification shall automatically become a part of the bid documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Letter(s) of Clarification. It is the responsibility of the bidder to ensure that it has obtained all such letter(s). By submitting a bid on this project, bidder shall be deemed to have received all Letter(s) of Clarification and to have incorporated them into this bid.

If you should have any questions, or if further clarification is needed regarding this Invitation for Bid, please contact me.

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cc: Bid File

Partnering to better serve Houston

Council Members: Brenda Stardig Jarvis Johnson Anne Clutterbuck Wanda Adams Mike Sullivan Al Hoang Oliver Pennington
Edward Gonzalez James G. Rodriguez Stephen C. Costello Sue Lovell Melissa Noriega C.O. "Brad" Bradford
Jolanda "Jo" Jones **Controller: Ronald C. Green**

SECTION B PART II TECHNICAL SPECIFICATIONS (CONTINUED)

ITEM NO. 1: PRE-OWNED TWIN ENGINE HELICOPTER (Continued)

4.0 STANDARD EQUIPMENT (Continued)

- 4.7.7 Anti-collision lights (2).
- 4.7.8 Searchlight, controllable.
- 4.7.9 Tritium lighted emergency exit signs.
- 4.7.10 Cockpit lights (2).
- 4.7.11 Dome lights (3).
- 4.7.12 External power receptacle.
- 4.7.13 Twin ignition and starting systems.
- 4.7.14 Seat belt sign.
- 4.7.15 Passenger step lights.
- 4.7.16 Baggage compartment light and fire sensor.
- 4.7.17 Utility cabin lights (removable).

4.8 Miscellaneous:

- 4.8.1 Covers – tail pipe, turbine air inlet, and pitot tube.
- 4.8.2 Flight bag.
- 4.8.3 Ground handling wheels, hydraulically activated.
- 4.8.4 Manuals – Aircraft Log; Engine Log; Engine Operations; Flight, Maintenance, & Overhaul Manual; and Illustrated Parts Catalog.
- 4.8.5 Tie-down assemblies – main and tail rotor.

5.0 ADDITIONAL EQUIPMENT – The aircraft shall include the following equipment:

5.1 Airframe:

- 5.1.1 Emergency Floats.
- 5.1.2 Rotor Brake.
- 5.1.3 Frahm Damper.
- 5.1.4 Wire Strike Protection System.

5.2 Lighting:

- 5.2.1 Light Emitting Diode (LED) Anti-Collision Lights
- 5.2.2 Light Emitting Diode (LED) Position Lights
- 5.2.3 Map Lights. Utility lights shall be installed in the cockpit, one for the pilot position, one for the copilot position, and one for aft tactical flight officer station.
- 5.2.4 Lighting Master Switch.
- 5.2.5 Hoist light. A light shall be provided that is attached to the hoist to allow a hoist operator to see directly below the hoist. A switch shall be provided in the cabin area near each sliding door to activate the light.
- 5.2.6 Recognition Lighting. A Pulselite Avoidance System shall be installed and integrated into the landing light.

5.3 Avionics:

- 5.3.1 FAA IFR. All avionics required by the FAA for single pilot IFR operations shall be installed.
- 5.3.2 Traffic Avoidance System. Automatic Dependent Surveillance–Broadcast (ADS-B) equipment with in/out capabilities shall be installed.
- 5.3.3 Emergency Locator Transmitter (ELT). An Artex C406-2HM ELT with NAN interface shall be installed.**
- 5.3.4 Global Positioning System (GPS). A Garmin GNS 430W GPS/Nav/Comm shall be installed.**
- 5.3.5 Transponder System. A transponder system with altitude encoder shall be installed.

SECTION B PART II TECHNICAL SPECIFICATIONS (CONTINUED)

ITEM NO. 1: PRE-OWNED TWIN ENGINE HELICOPTER (Continued)

5.0 ADDITIONAL EQUIPMENT (Continued)

- 5.6.10 Anti-Theft Device: One (1) keyed lock shall be installed so as to be easily accessible by the pilot. The lock shall enable and disable the starters and igniters.
- 5.6.11 Crew Bubble Window: Tech-Tool Plastics' Crew Bubble Window shall be installed.
- 5.6.12 Special Tools: All special tools needed to perform routine maintenance on the aircraft shall be provided.
- 5.6.13 Low Profile Dolly: One (1) low profile dolly for the proposed aircraft shall be provided.

6.0 DOWNLINK EQUIPMENT:

- 6.1 **Thermal Imaging/Camera:** One (1) FLIR System's, Inc. Ultra 9HD EO/IR thermal imager, which incorporates a 640x480 InSb thermal imager, a high-definition daylight camera, and a lowlight Electron Multiplied CCD imager in a single gimbal, and all controls and provisions shall be installed.
- 6.3 **Microwave Downlink System:** A Nucomm microwave downlink system, compatible with systems currently in use by the Houston Police Department and controllable from both the copilot and aft TFO station, shall be installed. This system consists of at least:
 - 6.3.1 One (1) p/n 70CMTX7-E1.5-339-A2BC17 Channel Master Portable Transmitter (to be supplied by the City)
 - 6.3.2 One (1) p/n SL-C90-01 SkyLink Control. Controls up to four (4) radios, Rx/Tx interfaces with existing VGA monitor to display microwave control and map.
 - 6.3.3 One (1) p/n SL-C10-01 SkyLink Control, C10 1 dzus-mounted control head for C90.
 - 6.3.4 One (1) p/n SL-OPT-USB-01 SkyLink USB Cable Extender.
 - 6.3.5 One (1) p/n SL-10-NVG-01 NVG compatibility option for C10 controller.
 - 6.3.6 One (1) p/n SL-OPT-ANT-01 Steerable antenna control (Pod).
 - 6.3.7 One (1) p/n SL-OPT-IMU-04 Digital IMU (Gyro-Compass) SBS.
 - 6.3.8 One (1) p/n SL-OPT-NTK-01 NavTrack optional FSK modulator or RS-232 output.
 - 6.3.9 One (1) p/n SL-OPT-GPS-01 GPS (16 Channel).
 - 6.3.10 One (1) p/n SL-OPT-NUC-TX-01 Nucommn Channel Master.
 - 6.3.11 One (1) p/n SLHD-6G-Y SkyLink HD 6.5 GHz Pod.
 - 6.3.12 One (1) p/n SL-ANT-2G-HG-01 Tx Internal Omni High Gain with Switch 2dBi 6.5 GHz.
 - 6.3.13 One (1) p/n SL-CPL-101 10dB Coupler Switch Box.
 - 6.3.14 One (1) p/n SL-ICA-C90-01 Cable assembly.
 - 6.3.15 One (1) p/n SL-ICA-IMU-04 Cable assembly.
 - 6.3.16 One (1) p/n SL-ICA-NUC-TX-01 Cable assembly.
 - 6.3.17 One (1) p/n SL-ICA-POD-01 Cable assembly.
- 6.4 **Monitors:**
 - 6.4.1 One (1) 8" 1024 x 768 monitor shall be installed at the copilot station for FLIR / video / moving map operations.
 - 6.4.2 One (1) 12" 1024 x 768 shall be installed in the aft tactical flight officer station.
 - 6.4.2 One (1) 14" HD monitor shall be installed in the aft tactical flight officer station.

7.0 OPTIONAL EQUIPMENT:

7.1. New Equipment Only:

- 7.1.1 Stabilized Binocular. One (1) Fujinon Techno-Stabi 14x40 stabilized binocular and optional accessory direct current (DC) power cord with male cigarette plug end shall be provided for the helicopter
- 7.1.2 Headsets. Ten (10) Bose Noise Canceling Aviation Headset X (battery operated) or latest model with accessories
- 7.1.3 Hydraulic Mule w/Adapter Kit

SECTION B PART II TECHNICAL SPECIFICATIONS (CONTINUED)

ITEM NO. 1: PRE-OWNED TWIN ENGINE HELICOPTER (Continued)

7.0 OPTIONAL EQUIPMENT (Continued)

7.1 Refurbished or New Equipment:

- 7.1.1 Hoist Camera w/DVR recording Capability
- 7.1.2 Rescue Basket
- 7.1.3 Flight Data Recorder
- 7.1.4 BLR FastFin System, if Applicable
- 7.1.5 Night Vision Goggle (NVG) Compatible Cockpit and Cabin Lighting

8.0 PUBLICATIONS – One set each of the following in paper and CD-ROM formats will be supplied:

- 8.1 Airframe Manuals. Maintenance Manual, Illustrated Parts Catalog and Component Repair & Overhaul Manual.
- 8.2 Power plant. Maintenance Manual and Illustrated Parts Catalog.
- 8.3 Components. Component Maintenance Manuals for special tools and installed equipment.
- 8.4 Wiring Diagrams. Two sets of wiring diagrams in paper if CD-ROM is unavailable.

9.0 TRAINING:

- 9.1 Pilot: Initial factory training, including ground, flight procedures, and operational check flight courses for the proposed aircraft shall be provided for six (6) pilots.
- 9.2 Mechanic Training: Factory training, including applicable field, avionics, and electrical systems maintenance courses for the proposed aircraft shall be provided for four (4) mechanics. The Department shall have up to twenty-four (24) months to utilize this training.
- 9.3 Mission Training: Initial mission specific training including tactical insertion/extraction, Bambi Bucket, swift water rescue, hoist operations, external load/cargo hook, and diver deployment shall be provided for six (6) pilots.

10.0 WARRANTY:

- 10.1 For all new equipment provided and installed on the helicopter, the Contractor/Supplier shall provide the following documents to the City:
 - 10.1.1 Manufacturer's standard warranty
 - 10.1.2 Any and all documents necessary/required to effect the warranty.
- 10.2 The Contractor/Supplier shall be required to transfer to the City all remaining warranties on equipment that has been previously installed on the helicopter. The Contractor/Supplier shall provide to the City documents required and necessary to effect the remaining warranties.

11.0 DELIVERY/INSPECTION:

- 11.1 Item(s) as specified above with delivery ticket and other required documents shall be delivered Prepaid, F.O.B. destination to the City of Houston. It is required that delivery be completed within 180 days, after the contractor's receipt of the City of Houston Purchase Order. Point of delivery will be the Houston Police Department, Air Support Division, 8402 Larson, William P. Hobby Airport, Houston, Texas.
- 11.2 **At the time of delivery an Annual Inspection shall have been performed and passed within the preceding thirty (30) days.**
- 11.3 At the time of delivery a borescope inspection shall have been performed and passed in the preceding thirty (30) days.
- 11.4 At the time of delivery a 5yr/3,000hr inspection in accordance with the manufacturer's and FAA specifications shall have been performed and passed within the preceding thirty (30) days.